

Reply to Non-Final Office Action  
Attorney Docket No.: MAT-001  
U.S. Serial No.: 10/665,921

### IN THE CLAIMS

Please amend the claims as follows:

1. (Withdrawn) A method for use in detecting a leak in a pressurized piping system conveying a liquid, comprising the steps of:

using a single, user demand detector to test for the presence of user demand on the pressurized piping system; and

determining whether pressure decay is present in the pressurized piping system when no user demand is present.

2. (Withdrawn) A method according to Claim 1, wherein the piping system conveying a liquid is a waterline.

3. (Withdrawn) A method according to Claim 2, wherein the waterline is a residential waterline.

4. (Withdrawn) A method according to Claim 3, wherein the testing step comprises determining whether there is a flow rate in the piping system that is greater than or equal to a preset minimal user flow rate.

5. (Withdrawn) A method according to Claim 4, wherein the minimal user flow rate is about 0.2 gallons per minute.

6. (Withdrawn) A method according to Claim 3, wherein the step of determining whether pressure decay is present comprises determining whether the pressure in the piping system has dropped below a minimum acceptable pressure.

7. (Withdrawn) A method according to Claim 6, wherein the minimum acceptable pressure is about 1.5 psig.

8. (Withdrawn) A method for use in detecting a leak in a pressurized piping system conveying a liquid, comprising the steps of:

using a single, user demand detector to test for the presence of user demand on the pressurized piping system;

determining whether pressure decay is present in the piping system when no user demand is present; and

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preventing flow of liquid into the piping system when pressure decay is present and no user demand is present.

9. (Withdrawn) A method according to Claim 8, wherein the piping system conveying a liquid is a water line.

10. (Withdrawn) A method according to Claim 9, wherein the water line is a residential water line.

11. (Withdrawn) A method according to Claim 8, wherein the testing step comprises determining whether there is a flow rate in the piping system that is greater than or equal to a preset minimal user flow rate.

12. (Withdrawn) A method according to Claim 11, wherein the minimal user flow rate is about 0.2 gallons per minute.

13. (Withdrawn) A method according to Claim 8, wherein the step of determining whether pressure decay is present comprises determining whether the pressure in the piping system has dropped below a minimum acceptable pressure.

14. (Withdrawn) A method according to Claim 13, wherein the minimum acceptable pressure is about 15 psig.

15. (Currently Amended) A system useful for detecting a leak in a pressurized piping system, comprising:

control logic;

a user demand detector consisting essentially of either a single flow switch or a single flow meter, the user demand detector capable of determining whether user demand is present in the pressurized piping system;

~~a single, user demand detector in communication with the control logic;~~

a pressure decay detector in communication with the control logic; and

a shut-off valve in communication with the control logic.

16. (Original) A system according to Claim 15, wherein the control logic is designed to close the shut-off valve whenever pressure decay is detected and no user demand has been detected.

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17. (Currently Amended) A system according to Claim 15, wherein the user demand detector ~~comprises~~ consists essentially of a flow switch.

18. (Currently Amended) A system according to Claim 15, wherein the user demand detector ~~comprises~~ consists essentially of a flow meter.

19. (Original) A system according to Claim 15, wherein the pressure decay detector comprises a pressure switch.

20. (Withdrawn) A method according to Claim 1, wherein the single user demand detector comprises a flow switch.

21. (Withdrawn) A method according to Claim 1, wherein the single user demand detector comprises a flow meter.

22. (Withdrawn) A method according to Claim 8, wherein the single user demand detector comprises a flow switch.

23. (Withdrawn) A method according to Claim 8, wherein the single user demand detector comprises a flow meter.